

V&V Summary Report

L2 ASCDS Version : 8.4.5

Observation 2222 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : Oct 12 2012

See axaff02222N002_VV001_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.10.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	93.9

Comments

Standard software processing technique using the tool `tgdetect` failed to determine an accurate position for the zeroth order for this observation. The source is extended and asymmetric. The zeroth order position was selected manually to be the same as used in `TGCat` for this observations (sky coordinates $x=4048.53$, $y=4240.04$). There are several emission peaks in the diffuse emission region. For grating analysis of localized X-ray emission within the extended emission, the investigator will need to extract one or more dispersed spectra using user-defined zeroth order positions for all positions of interest. ===

The default spectral cross-dispersio binning region is smaller than the source extent. The wavelength scale also depends upon the zero order reference, and any structure in the zero order may require multiple extractions with a different reference used in the `ciao` tool, `tg_create_mask`. Cross-dispersion regions can be selected in the `ciao` tool, `tgextract`.===

WARNING: there are no standard `ciao` tools for analysis of grating spectra from extended sources. The shape of an emission 'line' will be the shape of the zero order spatial structure convolved with the instrumental LSF. Grating extractions can be used, but need to be combined with custom spatial-spectral analysis, since wavelength is multi-valued at any particular diffraction angle.

seq_num	800161	Sequence number
obs_id	2222	Observation id
title	SPECTRAL-SPATIAL DIAGNOSTICS OF THE MOST LUMINOUS X-RAY CLUSTER OF GALAXIES WITH THE HETG	Proposal title
observer	PROF. STEVEN KAHN	Principal investigator
object	RXJ 1347.5-1145	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	206.879167	Observer's specified target RA [deg]
dec_targ	-11.753056	Observer's specified target Dec [deg]
ra_nom	206.87057677715	Nominal RA [deg]
dec_nom	-11.772146745296	Nominal Dec [deg]
roll_nom	251.10770244699	Nominal Roll [deg]
revision	3	Processing version of data
ontime	93900.800087437	Sum of GTIs [s]
livetime	92711.771616456	Livetime [s]
ontime4	93897.559097275	Sum of GTIs [s]
ontime5	93900.800087437	Sum of GTIs [s]
ontime6	93900.800087437	Sum of GTIs [s]
ontime7	93900.800087437	Sum of GTIs [s]
ontime8	93900.800087437	Sum of GTIs [s]
ontime9	93884.595266134	Sum of GTIs [s]
l2events	958556	Number of level 2 events

